



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,255	08/27/2003	Rory Lynn Van Tuyl	10031099-1	7179

7590 11/24/2004
AGILENT TECHNOLOGIES, INC.
Intellectual Property Administration
Legal Department, DL429
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER	
CONNELLY CUSHWA, MICHELLE R	
ART UNIT	PAPER NUMBER
2874	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/650,255

Applicant(s)

TUYL, RORY LYNN VAN

Examiner

Michelle R. Connelly-Cushwa

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

Eight (8) sheets of formal drawings were filed August 27, 2003 and have been accepted by the Examiner.

Specification

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-23 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-31 of copending Application No. 10/325,198. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-31 of Application No. 10/325,198 disclose or suggest all of the limitations of claims 1-23 of the present Application.

Regarding claims 1-3, 5, 10, 11, 18 and 19; claims 1-31 of Application No.

10/325,198 disclose a method, system and device for generating optical data encoded in a first format, comprising:

- generating a first optical data encoded in a first format with an optical data generator (see lines 1-3 of claim 7), the first optical data having a first level of jitter;
- receiving the first optical data at an input of an optical retiming device and reducing jitter associated with the first optical data by converting the first optical data to a second optical data encoded in a second format, i.e. generating optical data encoded in a second format (see lines 1-7 of claim 7; lines 1-3 of claim 15; and claim 16), the second optical data having a second level of jitter and being output at an output of the retiming device;
- inputting, into an optical pulse stretcher, optical data encoded in a second format (see claim 1; lines 8-10 of claim 7; and lines 4-11 of claim 15);
- using the optical pulse stretcher to convert the optical data encoded in the second format to a third optical data encoded in the first format (see lines 8-10 of claim 7), the third optical data having a third level of jitter; and
- outputting/transmitting from the optical pulse stretcher the optical data encoded in the first format;

- wherein the optical data encoded in the second format has a first level of jitter, and wherein the optical data encoded in the first format has a second level of jitter that is no greater than the first level of jitter (see lines 4-7 of claim 7; and claim 23).

Regarding claim 4; the invention of Application No. 10/325,198 comprises:

- generating a first optical data encoded in the first format, the first optical data having a first level of jitter; and
- optically retiming the first optical data to reduce jitter associated with the first optical data such that the first optical data is converted to a second optical data encoded in the second format, wherein the second optical data has a second level of jitter, and wherein the second optical data represents the optical data encoded in the second format (see claims 15-16, which disclose generating an initial optical data encoded in one format and optically retiming the initial optical data to reduce jitter such that the initial optical data is converted from the one format to another format).

Regarding claims 6, 14 and 20; claims 1, 2, 7, 8, 9, 26 and 27 of Application No. 10/325,198 disclose that the optical pulse stretcher comprises a birefringent medium.

Regarding claims 7, 15 and 21; claims 2, 8, 17 and 27 of Application No. 10/325,198 disclose that the birefringent medium is an optical fiber.

Regarding claims 8, 16 and 22; claims 3, 9, 18 and 28 of Application No. 10/325,198 disclose that the optical fiber is a polarization maintaining fiber.

Regarding claims 9 and 17; claim 31 of Application No. 10/325,198 discloses that the first format is NRZ and the second format is RZ.

Regarding claim 12; claim 13 of Application No. 10/325,198 discloses that the optical data generator comprises a light source, a modulator adapted to receive light from the light source, a multiplexer coupled to the modulator and adapted to provide electrical data encoded in the first format, and a clock for clocking the multiplexer.

Regarding claim 13; claims 14 and 25 of Application No. 10/325,198 disclose that the optical retiming device comprises a modulator driven by a clock signal such that the modulator operates as an optical AND gate on the first optical data.

Regarding claim 23; claim 21 of Application No. 10/325,198 discloses that the first format is an optical RZ format and the second format is an optical NRZ format.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-9 and 18-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyazaki et al. (US 6,532,091 B1).

Regarding claims 1, 3 and 5; Miyazaki et al. discloses a method of generating optical data encoded in a first format, the method comprising:

- generating an optical data encoded in the second format;

- inputting, into an optical pulse stretcher (264, see Figure 11), the optical data encoded in a second format;
- using the optical pulse stretcher to convert the optical data encoded in the second format to the optical data encoded in the first format; and outputting from the optical pulse stretcher the optical data encoded in the first format (see column 16, line 62, through column 17, line 19), and
- transmitting the optical data in the first format.

Regarding claim 2; the optical data encoded in the second format has a first level of jitter, and the optical data encoded in the first format has a second level of jitter that is no greater than the first level of jitter (see column 4, lines 25-44, and column 22, lines 13-23).

Regarding claims 6-8; the optical pulse stretcher (264) comprises a birefringent medium including a polarization maintaining optical fiber (see column 17, lines 2-3).

Regarding claim 9; the first format is an optical NRZ format and the second format is an optical RZ format in the invention of Miyazaki et al.

Regarding claims 18-23; Miyazaki et al. discloses an optical pulse stretcher, comprising:

- an input for receiving optical data encoded in a first format;
- means for converting the optical data encoded in the first format to optical data encoded in a second format; and

Art Unit: 2874

- an output for outputting the optical data encoded in the second format;
- wherein the optical data encoded in the first format has a first level of jitter, and the optical data encoded in the second format has a second level of jitter that is no greater than the first level of jitter;
- wherein the means for converting (264) comprises a birefringent polarization maintaining optical fiber; and
- wherein the first format is an RZ format and the second format is an NRZ format (see Figure 11; column 16, line 62, through column 17, line 19; column 4, lines 25-44; and column 22, lines 13-23).

Conclusion

Any inquiry concerning the merits of this communication should be directed to Examiner Michelle R. Connelly-Cushwa at telephone number (571) 272-2345. The examiner can normally be reached 9:00 AM to 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general or clerical nature should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562.

Application/Control Number: 10/650,255

Page 8

Art Unit: 2874

Michelle R. Connelly-Cushwa

Michelle R. Connelly-Cushwa

Patent Examiner

November 19, 2004